

# **PRIORITY-BASED BUDGETING/ WASHINGTON STATE'S PRIORITIES OF GOVERNMENT**

A Report Prepared for the  
**Committee on Efficiency in State Government**

By  
Taryn Purdy  
Principal Fiscal Analyst  
Legislative Fiscal Division

September 5, 2012



This report provides a brief description of priority-based budgeting (PBB). There are basic concepts of priority-based budgeting, portions of which are shared with a plethora of strategic planning, performance measurement, performance auditing, and other processes that go by a multitude of names and particulars around the country and around the world.

This report begins with a brief outline of the basic principles of PBB. This discussion is taken from several sources, including those governmental entities currently using the basic premise. An overall discussion as presented by the Governmental Finance Officers Association (GFOA) paper entitled “Anatomy of a Priority-Driven Budget Process”, can be found at the following website:

[http://www.gfoa.org/downloads/GFOA\\_AnatomyPriorityDrivenBudgetProcess.pdf](http://www.gfoa.org/downloads/GFOA_AnatomyPriorityDrivenBudgetProcess.pdf)

This report then turns to the State of Washington for two reasons:

- The program has been in place for several years and has an established infrastructure
- A state entity has more complications for implementation than other governmental entities, notably the separation of the branch that executes functions of government (the executive branch) from the branch that appropriates the funds and consequently prioritizes funding (the legislature). Therefore, Washington State’s experience can provide real world responses to potentially unique state government implementation issues

## **BASIC PRINCIPALS OF PBB**

PBB is a budgeting process that makes a systematic effort to determine government-wide priorities, the most effective way to address those priorities, and the most cost-efficient and operationally efficient ways of achieving desired results. It has been established in numerous municipalities and counties in both the United States and Western Europe. It essentially addresses several questions:

- What resources are available? What factors drive revenues?
- What are the most important functions of government and what results should be expected (priorities)?
- What should be monitored to ensure meeting the priorities/getting the results?
- What strategies should be pursued to achieve the desired results?
  - What are the most programmatically effective and economically efficient?
  - How can you tell?
- How will resources be divided among the priorities and strategies?

Attachment A takes a flowchart from “Anatomy of a Priority-Driven Budget Process” that illustrates specific steps.

## **STATE OF WASHINGTON PRIORITIES OF GOVERNMENT**

The following outlines the process used in Washington State’s in Priorities of Government (POG budget approach). It is structured to show the process, the players that are involved, and the basic types of information gathered and analysis done.

### **PROCESS**

The following provides salient points on the four main components used in Washington State:

- 1) Determine the most important values
- 2) Determine the results you want to achieve
- 3) Determine how progress toward success will be achieved and measured
- 4) Develop a results-based prioritization of activities that most directly accomplish the desired outcome

A schematic of a portion of the process can be found as Attachment B and the following website:

[http://www.ofm.wa.gov/budget/pog/documents/process\\_description\\_schematic\\_2012.pdf](http://www.ofm.wa.gov/budget/pog/documents/process_description_schematic_2012.pdf)

### Determine Most Important Values

- Create advisory council for purposes of coordinating and gathering input
- Conduct hearings around the state to get citizen input
- Washington State identified the following as its most important values:
  - Improve student achievement in elementary, middle, and high schools
  - Improve the value of postsecondary learning
  - Improve the health of Washingtonians
  - Improve the security of Washington's vulnerable children and adults
  - Improve economic vitality of businesses and individuals
  - Improve statewide mobility of people, goods, and services
  - Improve the safety of people and property
  - Improve the quality of Washington's natural resources
  - Improve cultural and recreational opportunities throughout the state
  - Strengthen government's ability to achieve results efficiently and effectively

### Determine the results you want to achieve

- Consensus process
  - State government and citizens
- Washington State identified six statewide results they wished to achieve:
  - Value world-class student achievement
  - Improve health and support of Washingtonians
  - Provide for public safety
  - Protect natural resources and cultural/recreational opportunities
  - Promote economic development
  - Improve state government efficiency

### Determine how progress toward success will be achieved and measured

- Determine key indicators of success
  - For “provide for public safety”, one indicator of success was identified, with several measures. The full document can be found at the following website:
    - <http://www.ofm.wa.gov/budget/pog/safety.asp>
- Measure and review performance and maintain over time
  - According to Washington State legislative staff, there are approximately 900 measures across state government
  - Measures for the corrections portion of public safety are included as Attachment C and can also be viewed at the following website:
    - <http://performance.wa.gov/FinalPublicSafety/PS061912/prisonoperations/Pages/Default.aspx>
- Identify proven or promising strategies

### Develop a results-based prioritization of activities that most directly accomplish the desired outcome

- Use this prioritization to inform the budget
- While agencies are individually named and budgeted, the prioritization, etc., is done on a multiagency level where appropriate

### ***Use by Governor***

- Agency teams used frameworks to determine priorities
- Was used as an advisory tool by the Governor in developing the budget

### ***Involvement of Citizens***

Citizen groups must be formed and staffed, and the means of gathering data determined (public meetings, etc.). In Washington these groups:

- 1) Help determine most important values
- 2) Help determine desired results
- 3) Review and comment on results through accountability forums

### ***Involvement of State Agencies***

Agency involvement and workload is very significant. In addition, states have had limited success in maintaining continuity of commitment and process when executives change. In Washington State, agencies:

- 1) Answer eight essential services questions (for the latest budget development)<sup>1</sup>
  - a. What are we doing now?
  - b. What are the most essential functions?
  - c. Are they being provided effectively at best cost?
- 2) Help determine desired results and strategies for achieving them
- 3) Collect, maintain, and review performance measurement information
- 4) Aid in prioritization

### ***Role and Involvement of Legislature***

The legislature is essential to the incorporation of any results into the budget and the budgeting process. States have had very mixed results over the years in fully incorporating the information from the various prioritization and performance measurement activities and budget building through the entire process.

As stated, use of this process by states presents an additional challenge due to the separate branches of government and the critical role each plays in determining what state government is. Nonpartisan legislative budget staff from both the Washington State House and Senate provided the following comments on how the Washington State legislature uses priority-based budgets, summarized here: Both staff agreed that the legislature does not use the information in a systematic way or use it to establish priorities.

- 1) One staff member stated that the legislature essentially did not develop a list of priorities beyond the normal determination of priorities through the budgeting process and “what gets the votes”.
- 2) A second staff member indicated that there was no formalized process for using any of the information gathered through the process, except that:
  - a. The information was all public and available, including all of the executive performance information
  - b. Some of the higher level information was given to all involved, with the remainder dependent upon individual members (including their expertise level and involvement in particular areas) and staff approaches and initiative as to how or whether it was used

## **PRIMARY RESOURCES**

Given the information-centric nature of the process and as can be seen from the brief summary above, a large volume of information is both generated and used at various stages. The following highlights some of the main sources and uses and provides electronic and/or attached examples. Please note that the techniques will cross processes.

### **Washington State Institute for Public Policy (WSIPP)**

To aid in determining which programs are producing the best results, in 1983 Washington State created the WSIPP. This organization is overseen by a board representing the legislature, the executive, and the university system and conducts research at the direction of the Washington State Legislature.

This office conducts systematic, evidence-based cost/benefit analyses that are used by legislators to allocate resources that have been shown to be most effective in achieving desired results. A report on prevention and intervention written by the office can be found at the following website, a portion of which is Attachment D:

<sup>1</sup> [http://www.ofm.wa.gov/budget/instructions/operating/2011\\_13/05\\_public\\_safety.pdf](http://www.ofm.wa.gov/budget/instructions/operating/2011_13/05_public_safety.pdf)

<http://www.wsipp.wa.gov/rptfiles/11-07-1201.pdf>

The Pew Center on the States is partnering with a number of states to adapt the models developed by the WSIPP in a number of public policy areas to their own states. Further discussion can be found in this report under “Results First”.

## **Governmental Management Accountability and Performance (GMAP)**

This area has within it a number of functions and processes. Among other duties, the Office of Financial Management (OFM) assesses performance of a number of functions of state government and oversees POG. It is within the Governor’s Office.

### ***Agency Performance***

There are a number of processes that take place under this general category. As stated, state agencies have a very significant involvement and workload in priority-based budgeting.

#### Statewide Results

The identified indicators of success and measures, along with identified strategies, can be found at the following website:

<http://www.ofm.wa.gov/budget/pog/default.asp>

The direct link to the “safety” indicator of success for “provide for public safety” is found at the following website:

<http://www.ofm.wa.gov/budget/pog/safety.asp>

#### *Other Performance Reports*

Other reports are available that report on identified measures for addressing the desired statewide results. They can be found at the following website:

<http://www.accountability.wa.gov/reports/vulnerable/default.asp>

The “dashboard” report for corrections with the statewide result of “provide for public safety” is included as Attachment C and can be found at the following website:

<http://performance.wa.gov/FinalPublicSafety/PS061912/prisonoperations/Pages/Default.aspx>

#### Performance Results

Each agency has a number of performance measures. A sample from the Department of Corrections is included as Attachment E, and the following links are to sites that show the full Department of Corrections report and the reports of all agencies:

Department of Corrections: <http://www.ofm.wa.gov/budget/activity/11-13/310inv.pdf>

All agencies: <http://www.ofm.wa.gov/performance/directory.asp>

Assessments conducted by OFM of various functions can be found at the following website:

<http://www.ofm.wa.gov/performance/assessments/docassessment.pdf>

#### Eight Essential Questions

As stated earlier, agencies address eight essential questions to determine necessity, priority, and funding of services. An example for public safety that illustrates the questions is included as Attachment F. A link for public safety and for which other agencies can be accessed is found on the following website:

[http://www.ofm.wa.gov/budget/instructions/operating/2011\\_13/05\\_public\\_safety.pdf](http://www.ofm.wa.gov/budget/instructions/operating/2011_13/05_public_safety.pdf)

## ***Lean***

The current Governor incorporates Lean principles and methods. Lean is based on the Toyota production method and is designed as a way to use "... principles, methods and tools to develop a culture of continuous improvement that encourages employee creativity and problem solving skills." The following links provide more information:

<http://www.lean.org/>

[http://www.accountability.wa.gov/leadership/lean/documents/Getting\\_Started\\_with%20Lean.pdf](http://www.accountability.wa.gov/leadership/lean/documents/Getting_Started_with%20Lean.pdf)

## ***Performance Audits***

The State Auditor's Office has the authority to conduct performance audits. The website for this function is:

<http://www.sao.wa.gov/EN/AUDITS/PERFORMANCEAUDIT/Pages/PerformanceAudit.aspx>

The Washington State Legislature has a Joint Legislative Audit and Review Committee (JLARC). Information on the committee can be found at the following website:

<http://www.leg.wa.gov/jlarc/Pages/default.aspx>

## **RESULTS FIRST**

Results First is being conducted by the Pew Center on the States (Pew) in partnership with several states to implement a cost-benefit analysis model to aid in identifying policy options that provide the best outcomes. Pew is a partner with the National Conference of State Legislatures (NCSL) and the John D. and Catherine T. MacArthur Foundation. This brief discussion is due to its relevance to the evaluation of the effectiveness of any budgeting system with a performance-based component, including Priority-Based Budgeting (PBB). Quoting the project website:

"Results First helps states assess the costs and benefits of policy options and use that data to make decisions based on results."

The model was first developed by the WSIPP and can be used to assess programs in a number of public policy areas, including criminal justice, education, public assistance, and others. The Results First project is working with volunteer states that were willing and able to devote the resources and provide the necessary information to adapt and apply the WSIPP model to their own states. Because this project is in process and will then be ongoing, the following link is provided for interested persons who wish to follow the project over time:

<http://www.pewstates.org/projects/results-first-328069>

According to Pew, the approach of the WSIPP that makes it unique from other cost/benefit efforts is based on the following factors. It:

- Analyzes all available studies from throughout the nation and documents what works and what doesn't
- Predicts the impact of each policy option for Washington State by applying the study data to Washington's data
- Calculates the benefits and costs of those impacts for Washington State
- Reports the projected benefits, costs, and risks of all options in the style of a Consumer Reports guide to policy options
- Analyzes the combined benefits and costs of a package of policies instead of judging each program in isolation
- Identifies ineffective programs that could be cut or eliminated to make room for investment in more cost-effective programs
- Makes the analysis accessible to policymakers in terms that can be understood
- Conducts follow-up studies to determine whether the predicted benefits actually materialized

## **How Results First Will Be Used and Expanded Into Other States**

Currently, 13 states are partnering with Pew to adapt the WSIPP model to their states. Over time, Pew will also assist with maintaining the models and helping other states incorporate their own information into the model for use in their own states.

According to Pew, Results First:

- Provides models to states
- Trains staff in using cost-benefit analysis
- Provides technical assistance in getting the models up and running
- Helps interpret cost benefit analysis results
- Helps states share lessons learned and strengthen policymaking
- Periodically updates models

This project will continue to be monitored as it proceeds.

### Steps in Priority-Driven Budgeting

There are eight major steps in a priority-driven budget process. Exhibit 1 provides a map for how the eight steps fit together, and the steps are more fully described in the following pages.<sup>7</sup> As the exhibit shows, the eight steps are not completely linear. Steps 1 and 2 can begin at the same time, and Step 8 comes into play at many different points of the process.

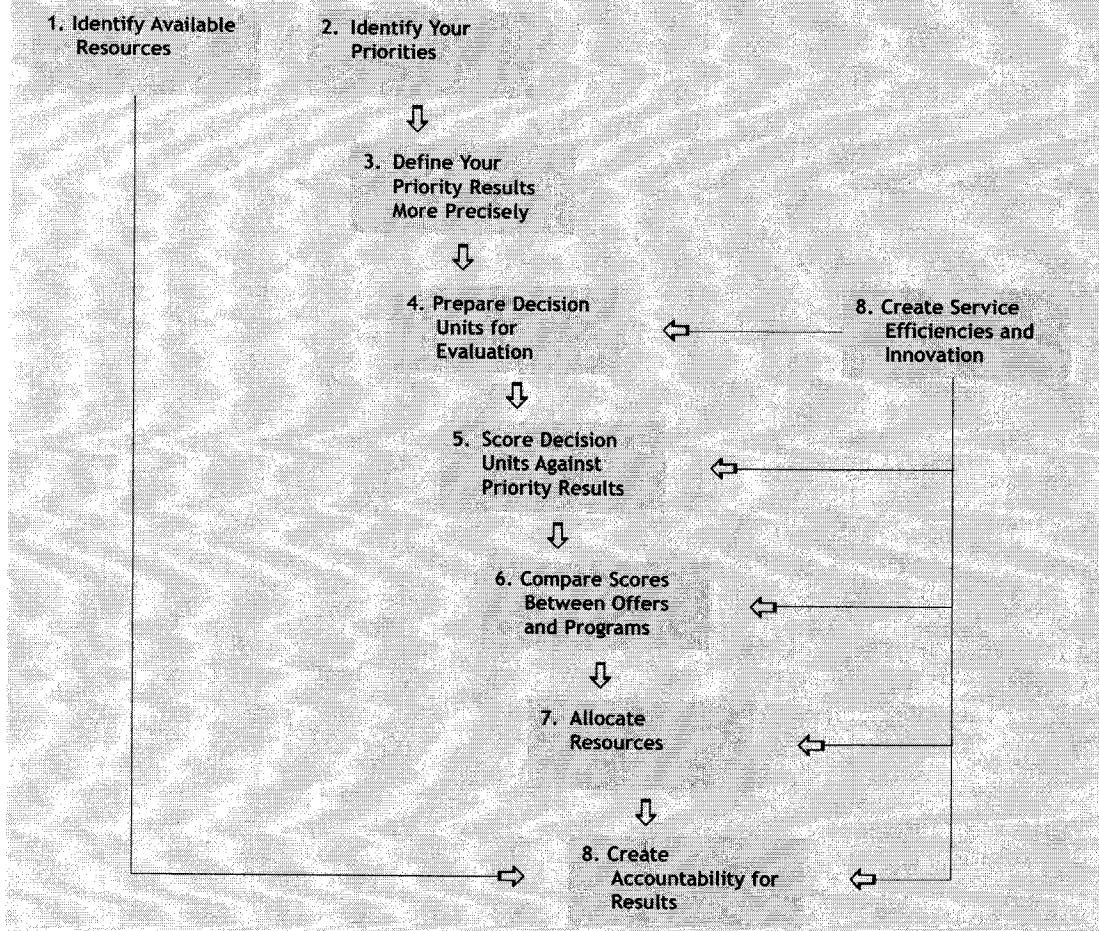
#### 1. Identify Available Resources

Before embarking on priority-driven resource allocation, the organization must undergo a fundamen-

tal shift in its approach to budgeting. This shift, while subtle, requires that instead of first having the organization identify the amount of resources "needed" for the next fiscal year, it should first clearly identify the amount of resources that are "available" to fund operations as well as one-time initiatives and capital expenditures.

As their first step in budget development, many organizations expend a great deal of effort in completing the analysis of estimated expenditures to identify how much each organizational unit will need to spend for operations and capital

**Exhibit 1: Process Map for Priority-Driven Budgeting**





## Priorities of Government (POG) Overview

### ESTABLISH STATEWIDE RESULTS

When Washington started its POG approach to budgeting, a team of state government and citizen executives came to consensus on a list of expected statewide results. The POG process is essentially a framework to help choose what state services best achieve these results.

#### Statewide Results List

- Student Achievement
- Health and Support
- Economic Development
- Public Safety
- Natural Resources and Cultural/Recreational Opportunities
- Government Efficiency

### IDENTIFY KEY INDICATORS OF SUCCESS

The second step in creating the decision framework is to consider how citizens would measure success in reaching the statewide result. For example, longer life expectancy or lower incidence of disease would probably indicate to most people that the population was healthier. Similarly, high employment rates usually signal that the economy is doing well.



### IDENTIFY PROVEN OR PROMISING STRATEGIES

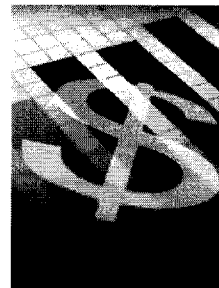
Research and experience suggest that certain strategies are more likely to put us on the path toward achieving the identified success indicators. (At this stage, it is also important to evaluate whether currently budgeted strategies and activities accomplish what was intended.)

#### Role of Activities and Performance Measures

The budget is displayed as an "activity inventory". This is a catalog of 1200+ discrete state activities, with descriptions of the service, how much it costs, who receives services, and expected outcomes. Performance measures help assess program effectiveness.

### DEVELOP A RESULTS-BASED PRIORITIZATION OF ACTIVITIES

The result-indicators-strategies framework for each statewide result provides the criteria for choosing the activities that most directly accomplish the desired outcome. With limited resources, it is necessary to invest in activities that connect to chosen strategies.



### USE THIS PRIORITIZATION TO INFORM FINAL BUDGET DECISIONS







Final budget decisions are influenced by state laws, funding sources, federal requirements and other factors that are difficult to change. However, the POG approach creates a unique perspective that allows decision-makers to consider evidence-based strategies and activity performance geared only toward results.

#### Key Benefits of POG


- Focuses budget decisions on contribution to overall results.
- Makes performance data more relevant to budget investment choices.
- Displays where the state invests its resources.

## Public Safety DASHBOARD




### 1. Corrections

Measure	Target	Actual	Status	Agency	Notes
1.1 - Staff Safety	1.0 Per 100 Offenders	1.05 per 100 Offenders		DOC	The average rate of violent infractions is 0.99 per 100 for FY 2012 through Quarter 3; however for the most recent quarter, the rate was 1.05. DOC continues to implement changes in policy and operations related to ESB 5907.
1.2 - Health Care Cost and Utilization Management	4%	-7%		DOC	The average medical cost per offender per year for FY 2011 was \$5,933. This is significantly lower than the peak of \$7,711 in FY 2008 and down from \$6,412 in FY2010.
1.3 - Participation in Evidence-Based Programs	11 of 11 Programs On Track	11 of 11		DOC	All 11 programs are on track to meet FY12 targets. Beginning FY 2013, DOC will report the number of offenders identified with an assessed need and the number who received programming based on the need and available resources.
1.4 - Community Intake Process	90%	92%		DOC	For FY12 Q3, Community Corrections staff exceeded the target of 90% by completing timely intakes at the rate of 92%. The latest data is through March, 2012.
1.5 - Violation Hearings in the Community	75%	74%		DOC	DOC's overall on-time percentage of warrant and detainer hearings for FY12 Q3 was 74%; however, 67% of hearings were conducted within 12 days of confinement as a result of being arrested on a warrant.
1.6 - Offender Re-Offense Rate	7% or Less	4.8%		DOC	For this reporting period, the re-offense rate for offenders on community supervision dropped to 4.8% compared to 6.9% for the previous reporting period. This is unusually low compared to prior experience.
1.7 - Recidivism	TBD	27.9%		DOC	WSIPP and DOC methodologies indicate that the recidivism rate decreased in each of the last three years measured. Property offenses are the non-violent offenses with the highest rates. Assault is the highest recidivism among violent offense types.

### 2. Emergency Readiness

Measure	Target	Actual	Status	Agency	Notes
2.1 - Next Generation 911	100% by 2017	20%		MIL	Migration to digital ESInet (Phases 1&2 of NG911 plan) was complete as of February 17, 2011. Work has begun on the remaining phases of the plan to upgrade the E911 infrastructure to be fully Next Generation 911 capable by June, 2017.

### 3. Worker Safety

Measure	Target	Actual	Status	Agency	Notes
3.1 - Workplace Fatalities	2.0 per 100,000 Workers by 2015	2.8 per 100,000 Workers		LNI	Washington's workplace fatality rates remain below the national average and continue to decline. The national target set by the CDC for 2010 is 3.2. Washington is in the lowest third of states nationally.
3.2 - Workplace Injury and Illness Rates	Close the gap between state and national rate	4.8 per 100 Workers		LNI	Washington's workplace injury and illness rate continues to decline, but it remains above the national average of 3.5.
3.3 - Hazards Identified and Fixed	50% of Inspections Find Serious Violations for Safety and Health	28% Safety Inspections; 33% Health Inspections		LNI	The percent of occupational safety and health inspections where serious hazards are found is below the national average. National average for safety inspections is 60%, health is 50%.



July 2011

## Return on Investment: Evidence-Based Options to Improve Statewide Outcomes —July 2011 Update—

The Washington State Legislature directed the Washington State Institute for Public Policy (Institute) to “calculate the return on investment to taxpayers from evidence-based prevention and intervention programs and policies.”<sup>1</sup>

In this update, we identify public policies that have been shown to improve the following outcomes:

- ✓ Child maltreatment
- ✓ Crime
- ✓ Education
- ✓ Labor earnings
- ✓ Mental health
- ✓ Public assistance
- ✓ Public health
- ✓ Substance abuse

This report presents our findings as of July 2011. Prior to the 2012 Washington legislative session, we will update and extend these results. The Legislature authorized the Institute to receive outside funding for this project; the MacArthur Foundation supported 80 percent of the work and the Legislature funded the other 20 percent.

The “big picture” purpose of this research is to help policy makers in Washington identify evidence-based strategies that can deliver better outcomes per dollar of taxpayer spending. In a time of fiscal constraint, this goal seems especially important.

This short report summarizes our current findings. Readers can download detailed results in two accompanying technical appendices.<sup>2</sup>

### Background

In the mid-1990s, the legislature began to direct the Institute to undertake comprehensive reviews of “evidence-based” policy strategies. The initial efforts were in juvenile and adult criminal justice. We identified several juvenile justice and adult corrections’ programs—not then operating in Washington—that had the potential to reduce crime and save Washington taxpayers money.<sup>3</sup>

### Summary

The Washington State Institute for Public Policy was created by the 1983 Washington Legislature to carry out non-partisan research assignments.

The 2009 Legislature directed the Institute to “calculate the return on investment to taxpayers from evidence-based prevention and intervention programs and policies.” The Legislature instructed the Institute to produce “a comprehensive list of programs and policies that improve . . . outcomes for children and adults in Washington and result in more cost-efficient use of public resources.”

The current project continues a long-term effort in Washington to identify evidence-based ways to deliver better outcomes per taxpayer dollar. This short report summarizes our findings as of July 2011. Readers can download detailed results in two technical appendices.

In subsequent sessions, the legislature used the information to begin a series of policy reforms.<sup>4</sup> Many “real world” lessons were learned about implementing these programs statewide.<sup>5</sup>

Today, the results of these crime-focused efforts appear to be paying off. Relative to national rates, juvenile crime has dropped in Washington, adult criminal recidivism has declined, total crime is down, and taxpayer criminal justice costs are lower than alternative strategies would have required.<sup>6</sup>

Suggested citation: Aos, S., Lee, S., Drake, E., Pennucci, A., Klima, T., Miller, M., Anderson, L., Mayfield, J., & Burley, M. (2011). *Return on investment: Evidence-based options to improve statewide outcomes* (Document No. 11-07-1201). Olympia: Washington State Institute for Public Policy.

<sup>1</sup> Laws of 2009, ch. 564, § 610 (4), ESHB 1244.

<sup>2</sup> <http://www.wsipp.wa.gov/pub.asp?docid=11-07-1201>

<sup>3</sup> Aos, S., Barnoski, R., & Lieb, R. (1998). *Watching the bottom line: cost-effective interventions for reducing crime in Washington* (Document No. 98-01-1201). Olympia: Washington State Institute for Public Policy.

<sup>4</sup> Barnoski, R. (2004). *Outcome evaluation of Washington State's research-based programs for juvenile offenders* (Document No. 04-01-1201). Olympia: Washington State Institute for Public Policy.

<sup>5</sup> Barnoski, R. (2009). *Providing evidence-based programs with fidelity in Washington State juvenile courts: Cost analysis* (Document No. 09-12-1201). Olympia: Washington State Institute for Public Policy.

<sup>6</sup> [http://www.wsipp.wa.gov/video\\_tvw21JAN2011.asp](http://www.wsipp.wa.gov/video_tvw21JAN2011.asp)

In the early 2000s, the legislature began to direct the Institute to apply the same benefit-cost approach to other public policy areas, including K–12 education, early childhood education, child welfare, adult mental health, and substance abuse.<sup>7</sup> This current project updates, refines, and extends these previous assignments.

Our ongoing goal is to provide policy makers with better “bottom-line” estimates each successive legislative session.

## General Research Approach

Over the last decade, as we have carried out these assignments, we have been improving a four-step research approach.

- 1) We systematically assess evidence on “what works” (and what does not) to improve outcomes.
- 2) We calculate costs and benefits for Washington State and produce a *Consumer Reports*-like ranking of public policy options.
- 3) We measure the riskiness of our conclusions by testing how bottom lines vary when estimates and assumptions change.
- 4) Where feasible, we provide a “portfolio” analysis of how a combination of policy options could affect statewide outcomes of interest.

For this project, we have also developed a software application to help legislative and executive staff use the information, and to respond to requests from other states.

<sup>7</sup> Other benefit-cost studies prepared by the Washington State Institute for Public Policy for the legislature include:

- Lee, S., Aos, S., & Miller, M. (2008). *Evidence-based programs to prevent children from entering and remaining in the child welfare system: Benefits and costs for Washington* (Document No. 08-07-3901).
- Aos, S., & Pennucci, A. (2007). *Report to the Joint Task Force on Basic Education Finance: School employee compensation and student outcomes* (Document No. 07-12-2201).
- Aos, S., Miller, M., & Mayfield, J. (2007). *Benefits and costs of k–12 educational policies: Evidence-based effects of class size reductions and full-day kindergarten* (Document No. 07-03-2201).
- Aos, S., Miller, M., & Drake, E. (2006). *Evidence-based public policy options to reduce future prison construction, criminal justice costs, and crime rates* (Document No. 06-10-1201).
- Aos, S., Mayfield, J., Miller, M., & Yen, W. (2006). *Evidence-based treatment of alcohol, drug, and mental health disorders: Potential benefits, costs, and fiscal impacts for Washington State* (Document No. 06-06-3901).
- Aos, S., Miller, M., & Drake, E. (2006). *Evidence-based adult corrections programs: What works and what does not* (Document No. 06-01-1201).
- Aos, S., Lieb, R., Mayfield, J., Miller, M., & Pennucci, A. (2004). *Benefits and costs of prevention and early intervention programs for youth* (Document No. 04-07-3901).

**Step 1: What Works?** In the first research step, we estimate the capability of various policies and programs to improve outcomes. We carefully analyze all high-quality studies from the United States and elsewhere to identify well-researched interventions that have achieved outcomes (as well as those that have not). We look for research studies with strong, credible evaluation designs, and we ignore studies with weak research methods. Our empirical approach follows a meta-analytic framework to assess systematically all relevant evaluations we can locate on a given topic.

**Step 2: What Makes Economic Sense?** Next, we insert benefits and costs into the analysis by answering two questions.

- ✓ How much does it cost to produce the results found in Step 1?
- ✓ How much is it worth to people in Washington State to achieve the outcome? That is, in dollar and cents terms, what are the program’s benefits?

To answer these questions, we developed—and continue to refine—an economic model that assesses benefits and costs. The goal is to provide an internally consistent valuation so that one option can be compared fairly to another. Our bottom line benefit-cost measures include standard financial statistics: net present values, benefit-cost ratios, and rates of return on investment.

We present these monetary estimates from three distinct perspectives: the benefits that accrue solely to program participants, those received by taxpayers, and any other measurable (non-participant and non-taxpayer) monetary benefits.

The sum of these three perspectives provides a “total Washington” view on whether a program produces benefits that exceed costs. Restricting the focus solely to the taxpayer perspective can also be useful for fiscal analysis and state budget preparation.

**Step 3: Assessing Risk.** The third analytical step involves testing the robustness of our results. Any tabulation of benefits and costs necessarily involves uncertainty and some degree of speculation about future performance. This is expected in any investment analysis, whether it is in the private or public sector. Therefore, it is important to understand how conclusions might change when assumptions are altered. To assess risk, we perform a “Monte Carlo simulation” in which we vary the key factors in our calculations. The purpose of the risk analysis is

to determine the odds that a particular approach will at least break-even. This type of risk and uncertainty analysis is used by many businesses in investment decision making; we employ the same tools to test the riskiness of the public sector options considered in this report.

**Step 4: Impacts on Statewide Outcomes.** In the final analytic step, we estimate the degree to which a "portfolio" of programs and policies is likely to affect statewide outcomes. We initiated portfolio analysis in 2006, estimating how a combination of prevention, juvenile justice, and adult corrections' programs could influence Washington's crime rate, the need to build prisons, and overall state and local criminal justice spending.<sup>8</sup> The legislature used this information in subsequent sessions to craft budget and policy decisions.<sup>9</sup> In the near future, we anticipate expanding portfolio analysis to other outcomes such as high school graduation.

---

## July 2011 Results

In this report, we summarize results from Steps 1, 2, and 3 of our research. We prepare a *Consumer Reports*-like list of what works and what does not, ranked by benefit-cost statistics and a measure of investment risk.

**Bottom Line.** We identify a number of evidence-based options that can help policy makers achieve desired outcomes as well as offer taxpayers a good return on their investment, with low risk of failure. Washington is already investing in several of these options. We also find other evidence-based options that do not produce favorable results.

**Summary Table.** In Exhibit 1, we have arranged the information by major topic area. Some programs listed, of course, achieve outcomes that cut across these topic areas. For each program, all the specific outcomes measured in the studies are described in the first technical appendix.

For some programs, we found insufficient information to allow a calculation of benefits and costs. We list these programs in each topic area, along with the reason for their exclusion.

**Example.** To illustrate our findings, we summarize results for a program called Functional Family Therapy (FFT), designed for juveniles on probation. This program is listed in the juvenile justice topic area in Exhibit 1. FFT was originally tested in Utah. Washington began to implement the program in the mid-1990s. The legislature continues to fund FFT, and it is now used by many of Washington's juvenile courts.

- We reviewed all research we could find on FFT and found eight credible evaluations that investigated whether it reduces juvenile crime. The technical appendix provides specific information on the eight studies in our meta-analysis of FFT; for example, two of the eight were from Washington.
- In Exhibit 1, we show our estimate that FFT achieves total benefits of \$37,739 per FFT participant (2010 dollars). These benefits spring primarily from reduced juvenile crime, but also include labor market and health care benefits due to increased probability of high school graduation.
- Of the total \$37,739 in benefits, Exhibit 1 shows that we expect \$8,536 to be received by taxpayers and \$29,203 will accrue to others, primarily people who were not victimized by the avoided crimes.
- Exhibit 1 shows that the program costs \$3,190 per participant to implement in Washington.
- Exhibit 1 also displays our benefit-cost summary statistics for FFT. The net present value (benefits minus costs) is \$34,549, and the benefit to cost ratio (benefits divided by costs) is \$11.86. The internal rate of return on investment is an astounding 641 percent. Finally, when we performed a risk analysis of our estimated bottom line for FFT, we found that the program has a 99 percent chance of producing benefits that exceed costs.
- Thus, one would conclude that FFT is an attractive evidence-based program that reduces crime and achieves a favorable return on investment, with a small chance of an undesirable outcome. These are the central reasons why FFT continues to be part of Washington's crime-reduction portfolio.

As noted, in addition to the summary information displayed in Exhibit 1, we have prepared two technical appendices. The first appendix presents detailed results for each program summarized in Exhibit 1, while the second appendix provides a comprehensive description of the research methods used to compute the estimates.

---

<sup>8</sup> Aas et al., 2006, Document No. 06-10-1201.

<sup>9</sup> Laws of 2007, ch. 522 §203, SHB 1128.

### Exhibit 1

## Monetary Benefits and Costs of Evidence-Based Public Policies

Summary of policy topics assigned to the Washington State Institute for Public Policy by the Washington State Legislature  
Estimates for Washington State, as of July 2011

Topic Area/Program	Monetary Benefits			Costs	Summary Statistics			
Benefits and costs are life-cycle present-values per participant, in 2010 dollars. While the programs are listed by major topic area, some programs attain benefits in multiple areas. Also, some programs achieve benefits that we cannot monetize. See Technical Appendix I for program-specific details.	Total Benefits	Taxpayer	Non-Taxpayer		Benefits Minus Costs (net present value)	Benefit to Cost Ratio	Rate of Return on Investment	Measure of Risk (odds of a positive net present value)
Juvenile Justice								
Aggression Replacement Training (Inst. <sup>2</sup> )	\$66,954	\$13,669	\$53,285	(\$1,473)	\$65,481	\$45.50	n/e	93%
Functional Family Therapy (Inst.)	\$60,539	\$13,719	\$46,820	(\$3,198)	\$57,341	\$18.98	n/e	99%
Aggression Replacement Training (Probation)	\$36,043	\$8,144	\$27,898	(\$1,476)	\$34,566	\$24.44	n/e	93%
Functional Family Therapy (Probation)	\$37,739	\$8,536	\$29,203	(\$3,190)	\$34,549	\$11.86	641%	99%
Multidimensional Treatment Foster Care	\$40,787	\$8,343	\$32,443	(\$7,739)	\$33,047	\$5.28	142%	85%
Multisystemic Therapy (MST)	\$29,302	\$6,521	\$22,782	(\$7,206)	\$22,096	\$4.07	28%	91%
Family Integrated Transitions (Inst.)	\$27,020	\$5,448	\$21,572	(\$10,968)	\$16,052	\$2.47	17%	86%
Drug Court	\$12,737	\$2,859	\$9,878	(\$3,024)	\$9,713	\$4.22	38%	80%
Coordination of Services	\$5,270	\$1,340	\$3,930	(\$386)	\$4,884	\$13.63	444%	78%
Victim Offender Mediation	\$3,922	\$977	\$2,946	(\$566)	\$3,357	\$6.94	89%	90%
Scared Straight	(\$6,031)	(\$1,591)	(\$4,440)	(\$63)	(\$6,095)	n/e	n/e	1%
Juvenile justice programs for which we have not calculated benefits and costs (at this time):								
Supervision for Juvenile Offenders	See previous WSIPP publications for past findings; an update is planned for December, 2011.							
Sex Offender Treatment for Juvenile Offenders	See previous WSIPP publications for past findings; an update is planned for December, 2011.							
Cognitive Behavioral Therapy (CBT <sup>3</sup> ) (general)	See previous WSIPP publications for past findings.							
Diversion Programs	See previous WSIPP publications for past findings.							
Juvenile Boot Camp	See previous WSIPP publications for past findings.							
Team Child	See previous WSIPP publications for past findings.							
Teen Court	See previous WSIPP publications for past findings.							
Wilderness Challenge Programs	See previous WSIPP publications for past findings.							
Adult Criminal Justice								
Dangerously Mentally Ill Offenders	\$103,596	\$24,391	\$79,205	(\$31,626)	\$71,969	\$3.28	19%	100%
Drug Offender Sentencing Alternative: drug offenders	\$28,013	\$6,680	\$21,333	(\$1,511)	\$26,502	\$18.57	n/e	99%
Correctional Education in Prison	\$19,923	\$4,785	\$15,138	(\$1,102)	\$18,821	\$18.11	n/e	100%
Electronic Monitoring	\$17,068	\$4,068	\$13,000	\$1,044	\$18,112	n/e	n/e	100%
Vocational Education in Prison	\$19,083	\$4,634	\$14,449	(\$1,537)	\$17,547	\$12.43	n/e	100%
Drug Treatment in the Community	\$15,419	\$3,671	\$11,748	(\$2,102)	\$13,317	\$7.35	n/e	100%
Drug Offender Sentencing Alternative: prop. offenders	\$14,324	\$3,410	\$10,914	(\$1,513)	\$12,811	\$9.47	n/e	76%
Mental Health Court	\$14,230	\$3,424	\$10,806	(\$2,878)	\$11,352	\$4.95	44%	100%
CBT (in prison)	\$10,741	\$2,588	\$8,153	(\$217)	\$10,524	\$49.55	n/e	99%
Drug Treatment in Prison	\$14,351	\$3,467	\$10,883	(\$3,894)	\$10,456	\$3.69	25%	100%
Intensive Supervision: with treatment	\$17,521	\$4,216	\$13,305	(\$7,712)	\$9,809	\$2.28	11%	96%
Drug Court	\$11,750	\$2,644	\$9,106	(\$4,099)	\$7,651	\$2.87	18%	100%
CBT (in the community)	\$7,739	\$1,848	\$5,891	(\$217)	\$7,522	\$35.70	n/e	99%
Work Release	\$6,466	\$1,552	\$4,914	(\$649)	\$5,817	\$9.97	n/e	97%
Correctional Industries in Prison	\$6,398	\$1,546	\$4,851	(\$1,387)	\$5,011	\$4.63	36%	100%
Community Employment Training/Job Assistance	\$4,641	\$1,104	\$3,537	(\$132)	\$4,509	\$35.13	n/e	100%
Intensive Supervision: surveillance only	(\$556)	(\$132)	(\$424)	(\$4,050)	(\$4,606)	(\$0.14)	n/e	10%
Domestic Violence Perpetrator Treatment Programs	(\$3,724)	(\$886)	(\$2,839)	(\$1,335)	(\$5,059)	(\$2.91)	n/e	20%
Adult criminal justice programs for which we have not calculated benefits and costs (at this time):								
Sex Offender Treatment	Review in process.							
Sex Offender Community Notification and Registration	Review in process.							
Adult Boot Camp	See previous WSIPP publications for past findings.							
Drug Treatment in Jail	See previous WSIPP publications for past findings.							
Jail Diversion for Mentally Ill Offenders	See previous WSIPP publications for past findings.							
Life Skills Education	See previous WSIPP publications for past findings.							
Restorative Justice for Lower-Risk Offenders	See previous WSIPP publications for past findings.							

# ATTACHMENT E

## ACT001 - Agency Activity Inventory by Agency

Department of Corrections

Appropriation Period: 2011-13 Activity Version: 2C - Enacted Recast Sort By: Activity

## 310 - Department of Corrections

### A001 Confine Convicted Adults in State Prisons

The Department of Corrections is responsible for the incarceration of felony offenders. This population includes offenders sentenced to confinement for violent, sex, person, drug, and property crimes. The majority of resources are allocated for custody activities such as the transportation of offenders, operation and security of offender housing units, perimeter and access control, and security threat group monitoring and investigation. Other items purchased through this activity include food service, laundry, clothing, and janitorial services; the administration of offender records; and routine maintenance and repairs to state-owned facilities and infrastructure.

#### Program 100 - Administration and Support Services

Account	FY 2012	FY 2013	Biennial Total
FTE	405.0	405.3	405.2
001 General Fund			
001-1 State	\$31,271,000	\$30,706,000	\$61,977,000

#### Program 200 - Correctional Operations

Account	FY 2012	FY 2013	Biennial Total
FTE	5,584.6	5,544.4	5,564.5
001 General Fund			
001-1 State	\$488,584,000	\$453,491,000	\$942,075,000
001-2 Federal	\$1,717,000	\$1,681,000	\$3,398,000
001 Account Total	\$490,301,000	\$455,172,000	\$945,473,000
11K Washington Auto Theft Prevention Authority Account			
11K-1 State	\$7,374,000	\$6,677,000	\$14,051,000

#### Program 300 - Community Supervision

Account	FY 2012	FY 2013	Biennial Total
FTE	20.4	20.4	20.4
001 General Fund			
001-1 State	\$1,719,000	\$1,720,000	\$3,439,000

#### Program 400 - Correctional Industries

Account	FY 2012	FY 2013	Biennial Total
FTE	7.0	7.0	7.0
001 General Fund			
001-1 State	\$3,598,000	\$3,589,000	\$7,187,000

Statewide Result Area: Improve the safety of people and property  
 Statewide Strategy: Confine and rehabilitate adult offenders

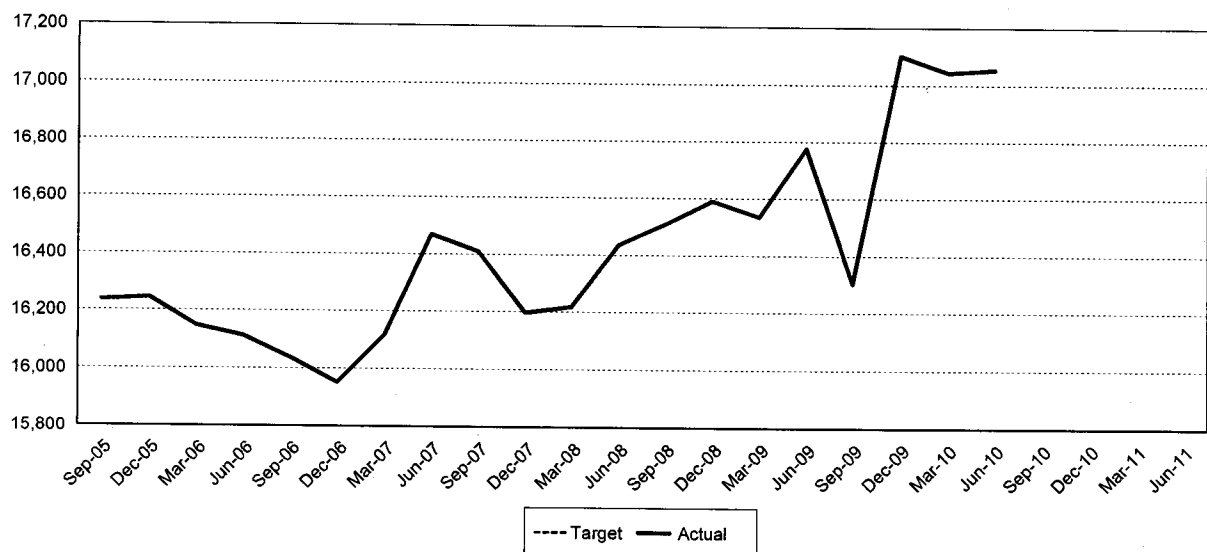
Appropriation Period: 2011-13 Activity Version: 2C - Enacted Recast Sort By: Activity

### Expected Results

The resources dedicated to this activity allow the department to purchase goods and services and employ skilled staff, which ultimately ensure the safe and secure operation of 13 institutions and 15 work release facilities across the state.

000361 Average daily population of offenders in correctional institutions.			
Biennium	Period	Actual	Target
2009-11	Q8		
	Q7		
	Q6		
	Q5		
	Q4	17,054	
	Q3	17,044	
	Q2	17,101	
	Q1	16,303	
2007-09	Q8	16,777	
	Q7	16,535	
	Q6	16,590	
	Q5	16,509	
	Q4	16,435	
	Q3	16,218	
	Q2	16,197	
	Q1	16,409	

Number 000361 - Average daily population of offenders in correctional institutions





# ACT001 - Agency Activity Inventory by Agency

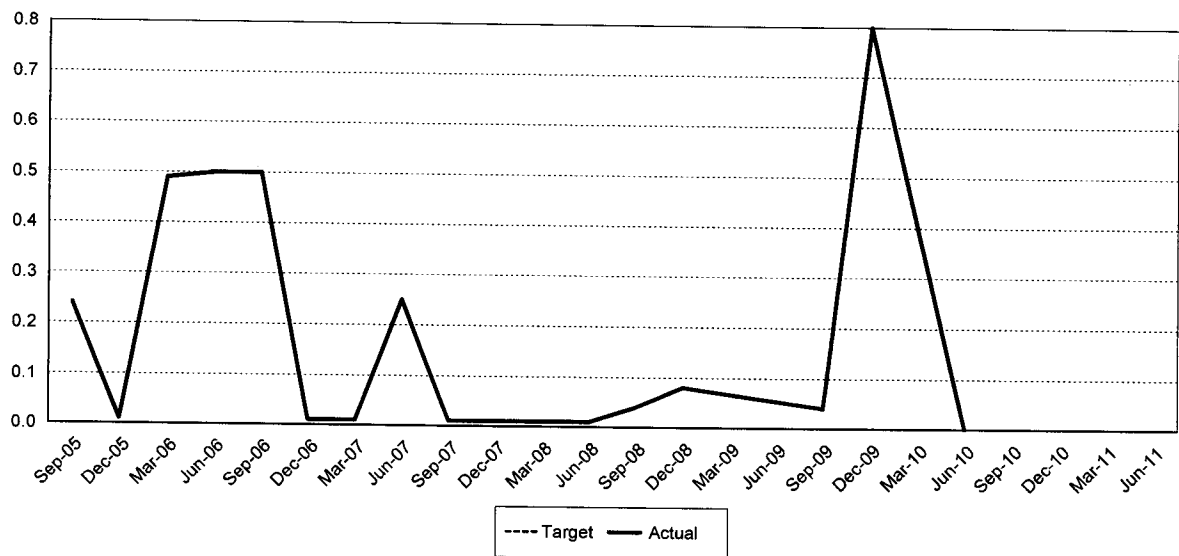
Department of Corrections

Appropriation Period: 2011-13 Activity Version: 2C - Enacted Recast Sort By: Activity

000134 Escapes per 1,000 offenders from total confinement			
Biennium	Period	Actual	Target
2009-11	Q8		
	Q7		
	Q6		
	Q5		
	Q4	0	
	Q3	0.4	
	Q2	0.8	
	Q1	0.04	
2007-09	Q8		
	Q7		
	Q6	0.08	
	Q5	0.04	
	Q4	0.01	
	Q3	0.01	
	Q2	0.01	
	Q1	0.01	

Number

000134 - Escapes per 1,000 offenders from total confinement



# ACT001 - Agency Activity Inventory by Agency

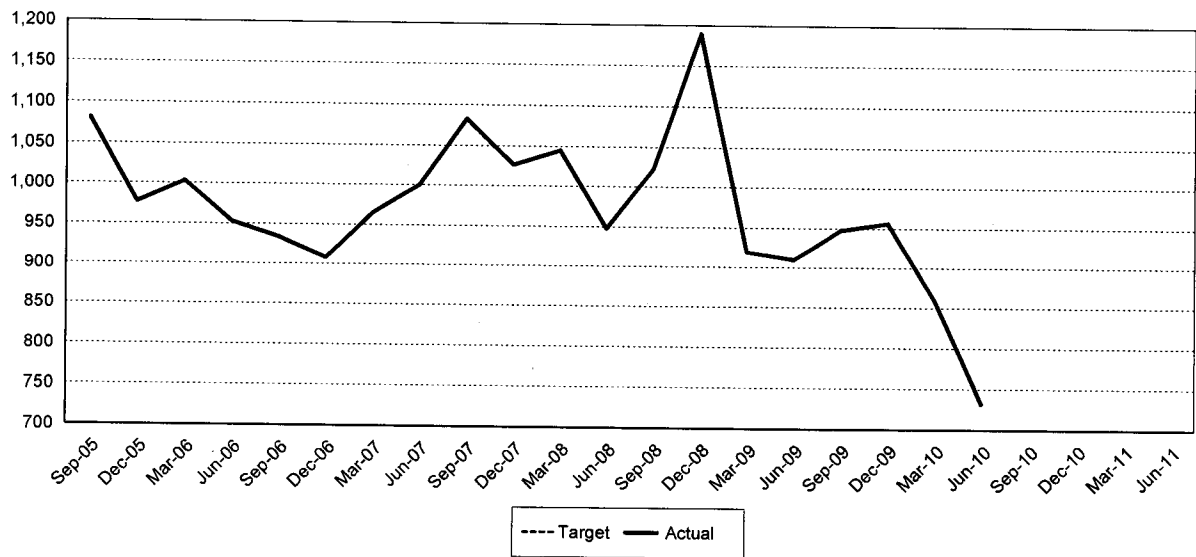
Department of Corrections

Appropriation Period: 2011-13 Activity Version: 2C - Enacted Recast Sort By: Activity

000119 Major infractions per 1,000 offenders			
Biennium	Period	Actual	Target
2009-11	Q8		
	Q7		
	Q6		
	Q5		
	Q4	732	
	Q3	859.2	
	Q2	956.8	
	Q1	947.6	
2007-09	Q8	910	
	Q7	919.2	
	Q6	1,189.6	
	Q5	1,022.4	
	Q4	947.6	
	Q3	1,045.2	
	Q2	1,026.4	
	Q1	1,082.8	

Number

000119 - Major infractions per 1,000 offenders



## Transforming Washington's Budget Essential Services Responses

### Dept of Social and Health Services

#### Community Services for Locally Committed Juveniles

##### Activity Description:

The Community Juvenile Accountability Act (CJAA) funds programs on a statewide basis that are demonstrated by research to reduce recidivism of juvenile offenders. CJAA programs target youth on county probation who are at moderate to high risk for reoffending. All of the 34 juvenile court jurisdictions representing 39 counties have implemented CJAA interventions. Pre-commitment at-risk services include diversion, probation supervision, individual and family counseling, drug/alcohol assessment and treatment, alternative education, vocational training, and psychiatric and psychological services. There are at-risk youth programs in all of the 34 juvenile court jurisdictions representing 39 counties. The Chemical Dependency Disposition Alternative (CDDA) provides courts with a sentencing option for chemically dependent youth, allowing judges to order youth into supervised treatment. Both locally sanctioned youth and certain youth who would otherwise be committed to the Juvenile Rehabilitation Administration (JRA) are eligible for CDDA. Special Sex Offender Disposition Alternative (SSODA), for certain first-time sex-offenders, allows the court to suspend the sentence of an adjudicated offender and instead order at least 24 months of community supervision, and require the youth to receive treatment in the community from a certified sex offender treatment provider.

##### Question #1 This activity is an essential Service, because it is:

Required by constitutional mandate - Y

Critical for preventing loss of life, addressing imminent issues of personal or public safety, or avoiding immediate and catastrophic loss of state property? - N

Critically necessary for the implementation of essential activities - N

##### In addition, does the activity have any of the following attributes?

Required by state law (RCW) - Y

Governed by an existing contract (may include collective bargaining) - N

Matched with federal funds - Y

Produces General Fund or other state revenues - N

Supported by Fees - N

##### Question #2 Does state government have to perform the activity? - Y

*Yes, statute requires JRA oversight. RCW 13.06 and WAC 388-710.*

##### Question #3 Can the activity be eliminated or delayed in recessionary times? - N

*No, public safety will be compromised if Evidence Based Programs are not delivered and State costs will be increased if youth that are currently served in local communities are sent to State Institutions..*

##### Question #4 Does the activity need to be paid for with state general funds (v. user fee) - Y

*Yes, though a form of user fee (parent pay) could be an option but Juvenile Justice involved youth and families may have limited ability to pay..*

##### Question #5 Are there federal funds or other fund sources available? - N

*No, though Medicaid funding is currently being explored as a possibility for evidence based services to the youth..*

##### Question #6 Are there more cost-effective, efficient ways for the state to perform? - N

*No, the JRA has recently completed a restructure of how these funds are distributed and how oversight is provided and implemented efficiencies where possible..*

##### Question #7 Can the activity be the subject of a performance contract? - Y

Information provided by the Dept of Social and Health Services to the Office of Financial Management - updated August 16, 2010

## Transforming Washington's Budget Essential Services Responses

---

*Yes, JRA is currently developing performance based contracts as they relate to this program area..*

**Question #8 Can the activity be the subject of a performance incentive? - Y**

*Yes, that could be a possibility and would need to be developed..*

Working Draft